



Perceptions and Experiences of Acupuncture among Expatriates Living in Korea: A Qualitative Study

Seungmin Kathy Lee¹, Inhyo Park², David B. Miller³, Sangjae Lee⁴

¹Korean Medicine Science Research Center, Pusan National University,

²School of Korean Medicine, Pusan National University,

³Jack, Joseph, & Morton Mandel School of Allied Social Sciences, Case Western Reserve University,

⁴Department of Longevity and Biofunctional Medicine, School of Korean Medicine, Pusan National University

국내 거주 외국인의 침 치료 경험과 한의학에 대한 인식: 질적연구

이승민¹ · 박인효² · 데이비드 밀러³ · 이상재⁴

¹부산대학교 한의과학연구소, ²부산대학교 한의학전문대학원, ³Jack, Joseph, & Morton Mandel School of Allied Social Sciences, Case Western Reserve University, ⁴부산대학교 한의학전문대학원 양생기능의학부

Objectives : In this study, we conducted a focus group interview among expatriates living in Korea, to investigate their experiences and perceptions of acupuncture and Korean Medicine in order to improve the usage of Korean Medicine in the medical tourism market. **Methods :** The inclusion criteria for the focus group interview was: (1) participants between the age of 20 to 75 years old; (2) those who had lived in Korea for more than 90 days, and (3) those who were able to express their thoughts freely in English. The participants were informed that the interviews will be recorded and transcribed. We ended recruitment once saturation of materials was met. Semi-structured interviews were conducted, and the data was analyzed after each interview. **Results :** The interviews were held between June to December 2016. Twenty-four participants were recruited but four dropped out and a total of twenty participants successfully finished the interviews. Six focus group interviews were conducted. Analysis revealed that Korean Medicine was relatively less known compared to Traditional Chinese Medicine or Complementary and Alternative Medicine. Participants automatically associated acupuncture with the management of pain or stress and replied that these were the areas that they thought acupuncture would be most effective. Positive experiences with acupuncture and with the acupuncture practitioners were factors that promoted the use of acupuncture whereas lack of awareness, accessibility and accreditation were factors that hindered its use. Other factors that hindered the use of acupuncture was needle phobia and the perception that acupuncture lacks scientific evidence. **Conclusions :** Awareness on Korean Medicine and acupuncture is low. Participants lack awareness on what diseases acupuncture can treat, the scientific evidence behind the mechanism of action, and the rigorous education system that Korean Medicine doctors must go through to get their license. Rigorous marketing should be encouraged, which includes greater exposure in the media, more honest reviews from patients, and promotion of the scientific evidence base.

Key words : Korean medicine, acupuncture, qualitative research

Received September 15, 2020, Revised September 22, 2020, Accepted September 22, 2020

Corresponding author: **Seungmin Kathy Lee**

Korean Medicine Science Research Center, Pusan National University, 49 Pusan Daehak-ro, Mulgeum-eup, Yangsan 50612, Korea
Tel: +82-51-510-8403, Fax: +82-51-510-8420, E-mail: seungmin.kathy@pusan.ac.kr

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Introduction

The use of complementary and alternative medicine (CAM) is increasing worldwide and the industry related to CAM is predicted to hit 1,542 hundred million dollars (USD) in the year 2020¹⁾. CAM treatments are especially popular in East Asian countries and it has been a main form of medicine before allopathic medicine was introduced. To this day, the healthcare system of these countries employs a dual medical system or a pluralistic medical system, in which allopathic medicine and traditional medicine exist side-by-side and doctors of both medicine practice similar responsibilities and duties in the medical field. South Korea has also employed this dual medical system since 1951 and was one of the first countries to cover traditional medicine in its National Health Insurance²⁾. Statistics also show that it has the highest number of traditional medicine doctors working at hospital facilities per capita³⁾. Owing to this environment, traditional medicine in Korea is widely accessible to the public.

Medical tourism is also a rapidly burgeoning industry. It has grown into a 60 trillion-dollar (USD) industry and countries such as Singapore, Thailand, and India have long established themselves as popular hosts^{4,5)}. South Korea, with its geographical advantage, joined the wave in 2009 and officially passed foreign patient legislation laws to start developing the industry as well⁶⁾. Surveys have shown that in Korea include cosmetic surgery (11.3%) and dermatology (11.1%) are popular choices for medical tourists, but Korean Medicine (KM) also ranks within the top ten⁷⁾. According to reports by the Korean Ministry of Health and Welfare, in 2016, KM treatment was received by 4.2% of the foreign patients. In 2010, a survey among Japanese medical tourists revealed that KM was among the top three most preferred areas for therapy⁸⁾. In 2011, a survey among US patients also revealed that KM treatment (19.2%) was the third most popular area for medical tourism, coming behind dental treatment (33.5%), and medical check-up (24.2%)⁹⁾.

However, not much research on how to increase awareness of acupuncture and how to improve KM services have been conducted. In 2012, a focus group interview among KM

doctors, nurses, and administrative personnel explored their previous experiences with foreign patients. The interviews revealed that low levels of English proficiency among health-care providers and a critical lack of knowledge in different cultures was a serious problem in many medical institutions, but no solution was provided¹⁰⁾. Another survey among Chinese tourists visiting Korea for non-medical reasons, revealed that only 8.8% were aware of KM. This revealed that medical tourists who visit Korea for KM treatment are usually those who are already CAM users¹¹⁾. The next task for CAM and KM practitioners alike is finding solutions to CAM and KM usage hindrances and finding strategies to raise awareness among non-users as well.

To understand the cultural differences and to produce feasible solutions, listening to the experiences and perceptions of expatriates who have lived in Korea is a logical first step. Awareness of acupuncture and KM among Korean nationals is high, and KM is already popularly used for treatment of musculoskeletal pain, neurological disorders and more. Statistics show that more than 78% of Koreans already have experience in KM treatment¹²⁾. However, expatriates come from countries that do not have similar rates of accessibility to acupuncture or KM treatment and are also relatively less aware. Yet unlike tourists, expatriates also retain significant knowledge of both cultures and are more likely to provide feasible long-term strategies and practical solutions.

Therefore, in this study, we aimed to explore the perceptions and experiences of acupuncture and KM among expatriates who have resided in Korea for more than 90 days. During the interview, we investigated whether greater exposure to acupuncture and KM is able to increase awareness among non-users and also looked into strategies to improve acupuncture and KM services.

Material and Methods

This qualitative study was aimed to explore the experiences of KM treatment among expatriates living in Korea.

Accordingly, a series of focus group interviews were conducted in order to reconstruct the participants' own experiences. These experiences were shared with other participants in the group with help from the interview facilitators (SMKL and DBM). The interviews were followed by transcription and coding process to discover concepts, sub-categories and categories grounded upon the principles of thematic analysis.

1. Participants

Participant inclusion criteria was set up in compliance with the purpose of the study while considering the focus group research method¹³⁾. Participants were eligible to participate in the focus group interview if they were above 20 years of age and under 75 years of age, had lived in Korea for more than 90 days, and was able to communicate in English to participate in the group discussion. We included only those who had lived in Korea for more than 90 days because visitors who plan to stay in Korea for more than 90 days must obtain a visa and 90 days is an appropriate cut-off value that differentiates tourists and non-tourists among the foreigners. Also, the researchers concluded that expatriates who have resided in Korea for more than 90 days are sufficiently acquainted with Korean culture while simultaneously retaining the different cultural viewpoint of medical tourists.

Participants were firstly recruited through personal network of the authors. After the first group interview, participants were purposefully selected from different nationalities and backgrounds. Theoretical sampling was utilized while considering all the possible variations discovered in the first group interview. On the other hand, snowball sampling was also used for further group interviews. Also, since recruitment was limited to expatriates, participants were recruited by means of InterNations, the world's largest expatriate community. During recruitment and analysis, we realized that there was a tendency for participants with prior experience of acupuncture and KM to be CAM-friendly. Thus, we also recruited those without any experience in order to listen to perceptions of non-users as well. Re-

ruitment ended once data saturation was met.

All the participants were informed of the study and consent was obtained. The study protocol for the qualitative trial was approved by the Kyung Hee University Korean Medicine Hospital Institutional Review Board (KOMCIRB#: 160603-HR-026).

2. Data collection and procedure

Six semi-structured open-ended group interviews were conducted in English, facilitated by the authors (SMKL and DBM) from June to December 2016. Each session of the group interview took about 40 to 60 minutes. A topic guide for group discussions was used to understand participant experiences of traditional Korean therapy and to examine the process of their perceptions on the therapy. Topics in the guide was developed to help the participants describe and recollect their memories while sharing it with the experiences of other participants. The concrete contents of the guide were modified between each session of the group interviews. All the interviews were conducted in a quiet and comfortable place, such as a coffee shop or a study room, which the participants chose. All interviews were recorded with participants' permission.

3. Analysis

After each interview session, audio recordings were transcribed verbatim by a trained student researcher and double-checked by researcher (SMKL). The coding process was carried out by the primary author (SMKL). Data were analyzed in accordance with the principle of inductive thematic analysis¹⁴⁾. Coding was conducted manually without using any software by reading the transcripts several times in order to extract concepts, categories, and subcategories. Once the categories were identified, they were reorganized to clarify them relevant to the main research goal of this study. After the coding process, transcripts and the result of analysis were rechecked by another author (IP).

4. Interviewer background

This study was designed following the Consolidated Criteria

for Reporting Qualitative Research (COREQ) checklist 18. The interviews were conducted either alone by the primary author (SMKL) or jointly with the corresponding author (DBM). SMKL is a KM practitioner with a PhD and licensed medical specialist degree in acupuncture. She has had several experiences in conducting qualitative studies which were related to patient experiences of traditional and complementary medicine or gender inequality in the medical workforce. DBM is a professor of social sciences, concentrating on social welfare and healthcare policies. He has also conducted focus group interviews and qualitative studies.

Results

A total of twenty-four eligible participants were contacted. Two declined due to time restraint, one refused to provide demographic information, and one participant's experience with KM was related to a very rare disease accompanied with personal issues that the researchers deemed it difficult for analysis. Overall, twenty expatriates participated in the focus

group interviews for this study.

1. Participant characteristics

The participants were from 16 different countries and consisted of 14 females and 6 males. The age ranged from 23 to 58 years (mean±SD, 34±9.1 years) and the length of residence in Korea ranged from 3 months to 27 years and 3 months. The basic characteristics of the participants in each session are shown in Table 1.

2. Analysis results

Participant perceptions and experiences of acupuncture and KM were categorized as follows: (1) lack of awareness of KM compared to TCM or CAM; (2) overall experiences of acupuncture and KM; (3) overall perceptions of KM, and (4) strategies for raising awareness. Perception of KM was further subcategorized into: (1) factors that hinder the use of acupuncture and KM, and (2) factors that motivate the use of acupuncture and KM.

Table 1. Demographic profile of the interviewees

Interview group	Code	Gender (F/M)	Age	Nationality	Total residence in Korea	Acupuncture/KM experience
#1	T1W1	F	51	Spain	4 months	Yes
	T1W2	F	34	France	5 months	None
	T1G1	M	37	India	7 years 1 month	Yes
	T1W3	F	25	Spain	3 months	None
	T1G2	M	30	Lebanon	6 months	None
#2	T2G1	M	32	Singapore	1 year 4 months	Yes
	T2W1	F	37	Singapore	4 months	None
#3	T3G1	M	50	England	3 years 1 month	None
	T3G2	M	36	Burkina Faso	1 year	None
	T3G3	M	32	Ghana	1 year 1 month	None
#4	T4W1	F	34	India	3 years 10 months	Yes
	T4W2	F	36	China	5 years 5 months	Yes
#5	T5W1	F	31	Egypt	1 year 2 months	Yes
	T5W2	F	58	USA	27 years 3 months	Yes
	T5W3	F	26	USA	3 years 2 months	Yes
	T5W4	F	29	USA	2 years 7 months	Yes
#6	T6W1	F	23	Romania	1 year 5 months	None
	T6W2	F	30	Rwanda	2 years	None
	T6W3	F	26	Mexico	2 years 4 months	None
	T6W4	F	28	Hungary	2 years 3 months	None

3. Lack of awareness of KM compared to TCM or CAM

Before directly asking about KM experiences, the interviewer asked each participant how well acquainted they were with traditional and complementary medicine. 17 participants out of 20 replied that they were aware of CAM, 16 replied that they were aware of Traditional Chinese Medicine (TCM) and acupuncture, and only 7 replied that they were aware of KM. Among the 20 participants, 9 and 8 participants, respectively, had actual experience with acupuncture or herbal medicine (Fig. 1).

As the numbers show, there was a lack of awareness regarding KM even among expatriates that had lived in Korea for a long time. Even though both KM and TCM use acupuncture and herbal medicine as main treatment modalities, acupuncture was more associated with TCM.

4. Overall experience of acupuncture and KM

There were both positive and negative experiences of acupuncture and KM among the participants. Most were positive experiences that the participants had experienced directly or indirectly from family members or friends. Most of the positive experiences with acupuncture and KM were related to relief of mental distress or pain. Relief of mental distress or pain were also the conditions, alongside allergies, that participants believed acupuncture and KM was helpful in.

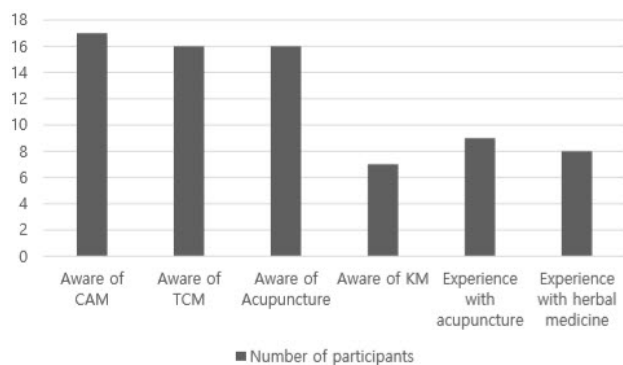


Fig. 1. Awareness of traditional and complementary medicine among participants (n=20).

I have had it [acupuncture and KM] before (...) and I believe that it gave me a lot of mental relief. Mentally you are relieved (T1W1, Female).

My husband twisted his ankle. He started to go to this acupuncture clinic in the neighborhood. (...) At that time I also had really bad back pain and I was just like 'I'll give it a try' (...) I think it was on the third visit that I started to walk. So after that actually I went back very often whenever I felt tired, had muscle pain, or especially when I had headaches (T4W2, Female).

Allergy, for example, going to a western doctor is not as efficient as going to an eastern medicine doctor. Eastern doctors they give you the needles and it's just like you feel so much better but for western doctor, I have to take a lot of medicine and I'm unable to do my stuff (T4W2, Female).

Not all positive experiences led to positive affirmation of acupuncture and KM. Even if symptoms got better, one participant brushed it aside as a mere placebo effect. Also, experiencing no changes in symptoms or a recurrence of related symptoms post acupuncture treatment was another indication for not using it again. In short, even though personal positive experiences usually led to another session of acupuncture, neutral or negative experiences that the participant experienced or heard of indirectly easily led to disuse.

We joked whether it was... what do you call it, the placebo, the placebo effect or whether the acupuncture did actually do some good (T2G1, Male).

They gave me five sittings with five needles each time (...) And then it was gone. I was walking straight. No pain. And then after two months it started aching on the right side of the hip area and then I can't stand (...) but I never went back for acupuncture. Because I think it wasn't working and it was painful (T4W1, Female).

5. Overall perception of acupuncture and KM

1) Factors that hinder use: lack of awareness, availability, accreditation, and needle phobia: Overall, participants men-

tioned the lack of awareness, availability, and accreditation as main factors hindering the use of acupuncture and KM. Lack of scientific explanation was another reason for not using acupuncture, but considering the large body of scientific studies that are being published regarding acupuncture, this factor was grouped into lacking awareness as well. Participants mentioned that there was a significant lack of information on what acupuncture and KM can treat, what it cannot, and also of regulations regarding sterile acupuncture needles for single-use. Shortage of information on all these subjects eventually led to concerns regarding efficacy and safety.

People don't have proper awareness that for some certain things you can go for acupuncture treatment or whatever. People are still not aware. So they will still go to conventional medicine and get a pain killer or an antibiotic (T3G3, Male).

I think it's more of the awareness of it? Mostly people are not aware of it? I only got to know about it because of the show. (...) Basically it was about the first medical doctor in China (T1W1, Female).

I realize that the needles might be finer but I guess again maybe it's my ignorance but I'm a little concerned about health issues. Because the needles ... are they reused? (...) Yea, I must admit I'm from a place of ignorance (T2W1, Female).

Lack of availability of acupuncture and KM back at home continued to be a hindrance to expatriates seeking acupuncture treatment in Korea. As acupuncture and KM was not a frequent treatment option for the participants while growing up, it was also not pursued in a foreign country. Even though participants had easy access to a KM clinic and Korean National Health Insurance made acupuncture and KM treatments inexpensive, conventional medicine was cheaper, making it an even better option.

Well I think yea it's [conventional medicine] ...um... still the go-to choice for ...it's the only choice that we know (T2G1, Male).

A lot of the times, medical visits is so cheap here I just go to a western (medical) doctor, I get the diagnostic but I don't take the medicine. And then if it doesn't get better then I would go to my acupuncture (T4W2, Female).

Many participants mentioned lack of accreditation of the practitioners as an important hindrance as well. Unlike conventional medicine where the education system and years of studies are known to be rigorous, not a single participant was aware of the education system of acupuncture and KM. This was not limited to KM but also included other traditional medicine that uses acupuncture as well, such as TCM.

(...) if I have a poor impression it's because of the practitioners. I don't know if they actually are educated enough. Do they have enough knowledge to practice it? But I do... yet I do believe ironically I do believe in the practice itself (T2W1, Female).

For like medicine I think 'Johns Hopkins' but for TCM? Blank. I can't even think of one college that does it. (...) There's no regulation no accreditation. It's kind of like the same thing... so to make it more official, like I said, I don't even know if there's a proper course to become a TCM doctor, I don't know how you even become a TCM doctor (T2G1, Male).

Half of the participants mentioned needle phobia as another hindrance to acupuncture and KM. Interestingly, such needle phobia was especially high among expatriates from Europe and Africa. Participants associated acupuncture needles with injection needles and injection needles were associated with pain. Since acupuncture sessions consist of using more than one needle, it was perceived to be more painful. Only those who had actually experienced acupuncture were aware that the needles were thinner and that it was not as painful as they had thought. Also, since needles are associated with a very negative image in Africa, one participant recommended using a treatment modality other than acupuncture such as moxibustion for treatment.

Using a huge needle, or a lot of needles is ...what is it u m... I know that mostly are afraid of needles. Some people they don't like needles at all. Injections. They don't like taking injections. Even if you try, [the injection needles used in Africa] the needles break. You don't re-use them at all (T3G2, Male).

It's scarier than I thought. [laughs] I mean the thought of it is scarier than what it actually is. After [acupuncture treatment] I was just like 'oh, it's just a prick' [laughs] (T1W2, Female).

When you say acupuncture, we try to ... forget it. Moxibustion can be more acceptable [in Africa] (T3G1, Male).

Other hindering factors included limited usage of acupuncture and KM for treating health problems other than the ones that it is known to be effective in, and existing language barriers between the practitioner and the patient. Participants mentioned that other than a few conditions known to be effective by acupuncture and KM, they were skeptical as to whether acupuncture and KM could significantly help with other health problems such as menstrual pain, diabetes, or cancer.

If I have cancer, or I don't know, of course I would go to take traditional medicine but maybe as a supplementary cure (T6W2, Female).

Cancer...I can't say...yea cancer. I don't know if there is some evidence. Not sure the effectiveness traditional Korean medicine in cancer. Yea it can be effective for pain in general but for cancer, I don't [think so]. I cannot say (T3G1, Male).

The language barrier between the practitioner and the patient was not limited to acupuncture and KM practitioners but pertained to conventional medical doctors in Korea as well. These problems existed because although the government provided translation services for medical tourists visiting Korea, these services were expensive and not easily accessible for local residents or expatriates. The language barrier was a big obstacle for using medical services in Korea

because it led to disuse of medical prescriptions as well.

In my experience when the translation is available is that it's not usually good enough to really make you feel comfortable (T5W1, Female).

I went to a clinic but the explaining was hard. I tried to explain but they could not understand and they were trying to explain to me but I could not understand so eventually they gave me my medicine but I haven't taken that medicine because if we did not understand each other [giggles]. So yeah, it's so hard when there is a language barrier (T6W2, Female).

2) Factors that motivate use: dissatisfaction or negative experiences with conventional medicine, good rapport with the practitioner, and chemical-free treatment:

Despite the many obstacles, there were also strong motivators for using acupuncture and KM. These included having unsatisfactory experiences with conventional medicine, KM being chemical-free, and having a good rapport with a specific KM practitioner. Dissatisfactory experiences with conventional medicine included losing trust with doctors because of medications prescribed without sufficient explanation and treatment choices given that do not reflect participant wishes. Lack of understanding and shortage of treatment options regarding certain diseases were also a reason participants would search for therapy elsewhere such as in acupuncture and KM.

I do have this friend of mine, she used to work in Korea, and both of her kids were born here. They have a severe episode of atopic dermatitis. So bad they were bleeding and there was water coming out of the skin. The worst I have seen. She used to come back here every 2 to 3 months to the Korean medicine clinic to get medicine because she has tried many things, western, eastern, Chinese, Korean. Only that [Korean] doctor helped her, that particular doctor. She has been to many in Korea, and the other ones couldn't be that useful as that doctor. So I think it's the confidence [in the practitioner] that matters (T4W2, Female).

I don't really have very good experiences with the western

medicine in Korea. Whenever I go to a doctor, they just ask you to do surgery here. It's very common like...my friend's husband broke both arms. When they went to a doctor they just immediately said they want to open up. But for those kinds of things you don't really need surgeries for broken bones. They went to a third hospital and they said 'oh you can wait and see' (T4W2, Female).

The factors that helped participants to develop good rapport with a KM practitioner included thoroughness and treatment skills. Acupuncture and KM practice tend to require more consultation time with patients and this procedure was received with positivity. Also, whether the doctor was a KM doctor or a conventional medical doctor did not matter as long as they were able to successfully treat their symptoms. The increasing popularity and trend of traditional and complementary medicine usage was also mentioned.

Because I have such good faith in this doctor, so whenever I get sick, even when I get a flu, cold, stomach burps. I go to him first. It wasn't about the practice of eastern or western doctor. It was the doctor. I have good experiences with him, and he was helping me a lot, so I would think about going to him whenever I feel sick (T4W2, Female).

Participants also showed a dislike for pharmaceuticals and the belief that acupuncture and KM treatments are more natural than conventional medicine was appealing. Pharmaceuticals were strongly associated with inducing unwanted side-effects and especially unnecessary for health problems that were not serious.

I mean there's all kinds of unforeseen side effects and things (using pharmaceutical pills) that you are doing to your body and I have been surprised like, even though there was a part of me that, a big part of me that look, say and believed in taking less Western medicine, stuff like that ...” (T5W2, Female).

I think it's (acupuncture and KM) so interesting because it's so natural. You know, you don't have to take pills,

chemicals (T1W2, Female).

6. Strategies for raising awareness: increasing media coverage, marketing, and scientific evidence

Since lack of awareness was a critical hindrance to the usage of acupuncture and KM, increasing media coverage, improving marketing strategies, and providing more scientific evidence were mentioned as important solutions. A few participants replied that they first became aware of acupuncture and KM through programs airing on the media, and also mentioned that media was an influential tool for branding acupuncture among the younger generation.

I think it's more of the awareness of it? Mostly people are not aware of it? I only got to know about it because of the (TV) show. Because of all different (TV) shows. Basically it was about the first (traditional) medical doctor in China (T2W1, Female).

From TV, I believe in the ... the effectiveness of [acupuncture] (T1W1, Female).

I think it is changing now. Because of TV and the influence of the media [the younger generation are also looking for acupuncture] (T3G1, Male).

Marketing was an area that needed most improvement, especially regarding good and trustworthy reviews. Participants acknowledged that good word-of-mouth by experienced friends and colleagues were sufficient to get them started. Of note, many were skeptical of paid reviews on the internet and relied more on reviews from people nearby. This was especially so if the participant could not speak Korean and had limited access to information online. Other noteworthy marketing strategies included using Korean drama and music to indirectly market acupuncture and KM or using already well-known Korean products such as ginseng and expanding the market from there. Scientific evidence needed to be provided and publicized more rigorously to raise credibility of acupuncture and KM usage.

Because I don't read Korean, I just receive information

from my husband, and he really praised the practitioner. And then he went there a few times before I went there. He said like on the Naver (Korean search engine), that the reviews are good and the seems kind of reliable. I think what comforts me most is that someone I'm really close to, had really good experience (T4W2, Female).

I will hear for experience of people first and then dig in for some information, and if I can of course, go financially, I will go (T5W4, Female).

Discussion

This study was the first qualitative research to explore the perceptions and experiences of acupuncture and KM among expatriates living in Korea. The interviews first focused on finding factors that hinder or motivate use of acupuncture, and then looked for feasible solutions and strategies to increase awareness. Focus group interviews with expatriates revealed that despite promotion of KM for several years, awareness of KM was significantly low. If the participant had heard about KM, they knew that it utilized the same treatment modalities as TCM but not much more. This is understandable since Korea only started promoting its traditional medicine under the official name 'Korean Medicine' in 2012. Before that, the umbrella term 'Oriental Medicine' was used to encompass all traditional East Asian medicine that shared similar foundations with TCM and furthermore, many had associated 'Oriental Medicine' with TCM. Thus, the period of promoting KM has not been sufficiently long enough to raise awareness.

Also, this study revealed that there were mixed experiences of acupuncture and KM among expatriates and that these experiences significantly affected continued use. A positive experience naturally led to another session of treatment but a neutral experience such as no change in symptoms or having a positive experience followed by a recurrence of symptoms later, made participants disregard acupuncture and KM. The standard for measuring effectiveness was considerably different from conventional medicine,

and expectations were higher for acupuncture. To reduce such unrealistic expectations and misunderstandings, raising awareness on how acupuncture and KM works should be a priority. Hospital and KM doctors should also work to develop an active communication system with patients to provide better details on what to expect. During check-up visits, KM doctors should allot more time in explaining the specific changes in symptoms that are expected with each treatment and preferably, try to assess and quantify the changes. Elucidation of the treatment process and effects will help to reduce treatment effects being discarded as mere placebo.

Participants also mentioned lack of scientific studies as a reason for not using acupuncture or KM. Non-users still perceived acupuncture as lacking evidence, associated with high risks, and being non-standardized. This is another area where acupuncture lacked awareness. For almost fifty years, acupuncture studies have been conducted by scientists worldwide, resulting in more than 13,000 studies, and mounting evidence suggests use of acupuncture in 117 conditions. Up to date, more than 1,000 systematic reviews have explored the effectiveness and a recent consensus published by the National Institutes of Health stated there is clear evidence that acupuncture is an effective treatment method that can be used as a stand-alone, adjunctive, or integrative method¹⁵⁻¹⁷. However, dissemination of such scientific data and evidence is currently limited to healthcare practitioners and rarely reached by the public. The interviews revealed that in the future, much more effort must be made not only in conducting scientific studies, but in transparently sharing the results as well.

Other than lack of awareness, lack of availability and accreditation, and an existing language barrier between the practitioner and the patient were all identified as important hindrances to the usage of acupuncture and KM. Fortunately, an increasing number of countries are introducing acupuncture into their healthcare system which is in effect, helping to increase availability to the acupuncture naïve. This study shows that more exposure to acupuncture and Korean Medicine does not necessarily increase awareness nor lower

the barrier for seeking acupuncture treatment among foreigners, therefore, increasing exposure and availability in each home country is a feasible solution. Also, the development of fast and accurate real time translation devices should be able to eventually lower communication barriers. Meanwhile, increasing media coverage and improving marketing strategies should be an integral part considered for raising awareness worldwide.

Our study had some limitations. First, one of the interviewees was a licensed Korean medicine doctor (SMKL) and a board-certified specialist in Acupuncture Medicine. This could have led to unwanted biases during the interview process. However, to avoid such bias, the participants were not informed of the interviewee's background before or during the entire interview process. One group of participants was aware that SMKL was a practitioner in the field of acupuncture. Therefore, another interviewee (DBM) participated in the focus-group interview and led the discussions.

Second, female expatriates participated in the group interviews significantly more than male. It was mainly because men were more reluctant to consent to group interviews, especially in the case of non-native English speakers. However, we do not believe that this would be a critical limitation in our findings because acupuncture users in several countries are mostly female^{18,19}. Likewise, there was a lack of participants from China, Japan and Russia who are known to make up a big percentage of foreign patients visiting the medical institutes of traditional Korean medicine. Here as well, not many Chinese, Japanese, or Russians were willing to participate in a group interview that was conducted in English. The two limitations could have resulted in sampling bias regarding the participants' gender and nationality. In future studies, the aforementioned shortages should be considered during the recruitment process.

Lastly, this study was conducted before the COVID-19 pandemic. The healthcare scenery has changed completely during the past few months. Whether or not society will be able to go back to pre-COVID-19 times is unknown, but it is certain that online medical services will commence sooner than expected. Future studies will have to incorporate such

changes when exploring strategies to improve acupuncture and KM services.

Acknowledgement

None.

Funding

None.

Data availability

The authors can provide upon reasonable request.

Conflicts of interest

The authors have declared that no conflicts of interest exists.

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